

**WHAT IS CLAIMED IS:**

1           1.       A method of operating a fault tolerant connection in a network,  
2 wherein said network comprises a plurality of network elements and each one of said  
3 network elements is coupled to at least one other of said network elements by at least  
4 one of a plurality of links, comprising:  
5           identifying a first path, wherein said first path is between a first one of said  
6                       network elements and a second one of said network elements;  
7           identifying a second path, wherein  
8                       said second path is between said first one and said second one of said  
9                       network elements, and  
10           said first path and said second path are disjoint;  
11           sending a packet from said first one of said network elements via said first  
12                       path;  
13           sending a duplicate packet from said first one of said network elements via  
14                       said second path, wherein said duplicate packet is a duplicate of said  
15                       packet; and  
16           receiving at least one of said packet and said duplicate packet at said second  
17                       one of said network elements.

1           2.       The method of claim 1, further comprising:  
2           discarding one of said packet and said duplicate packet, if both said packet and  
3                       said duplicate packet are received at said second one of said network  
4                       elements.

1           3.       The method of claim 2, wherein said first path and said second path are  
2 node-disjoint.

1           4.       The method of claim 3, wherein said first path is a shortest node-  
2 disjoint path and said second path is a second-shortest node-disjoint path.

1           5.       The method of claim 2, wherein said first path and said second path are  
2 link disjoint.

1           6.       The method of claim 5, wherein said first path is a shortest link-disjoint  
2 path and said second path is a second-shortest link-disjoint path.

1           7.       The method of claim 1, wherein said first path and said second path  
2 each include ones of said network elements and said links.

1           8.       A network, wherein said network comprises a plurality of network  
2 elements and each one of said network elements is coupled to at least one other of said  
3 network elements by at least one of a plurality of links, comprising:  
4           a first network element;  
5           a second network element, wherein  
6                said first and said second network elements are ones of said network  
7                elements,  
8                said first and said second network elements are coupled to one another  
9                by a first path and a second path,  
10           said first network element is configured to send a packet via said first  
11           path and send a duplicate packet via said second path,  
12           said duplicate packet is a duplicate of said packet, and  
13           said second network element is configured to receive at least one of  
14           said packet and said duplicate packet.

1           9.       The network of claim 8, wherein said second network element is  
2 configured to discard one of said packet and said duplicate packet, if both said packet  
3 and said duplicate packet are received at said second one of said network elements.

1           10.      The network of claim 9, wherein said first path and said second path  
2 are node-disjoint.

1           11.     The network of claim 10, wherein said first path is a shortest node-  
2     disjoint path and said second path is a second-shortest node-disjoint path.

1           12.     The network of claim 9, wherein said first path and said second path  
2     are link disjoint.

1           13.     The network of claim 12, wherein said first path is a shortest link-  
2     disjoint path and said second path is a second-shortest link-disjoint path.